

REMARKS

Upon entry of the present amendment, claims 1-4, 8-10, 14-20, and 22 will remain pending in this application. Claim 6 is cancelled in this paper. Claims 5, 7, 11-13, and 21 were previously cancelled. Applicant respectfully submits that no new matter is added by the present amendment.

Claims 1 and 17 stand objected to. Claims 1-4, 8-10, and 17-20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,349,296 ("Broder et al.") in view of U.S. Patent No. 6,658,423 ("Pugh et al.") or Applicant admitted prior art (AAPA) and further in view of U.S. Patent No. 6,058,410 ("Sharangpani"). Claim 6 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Broder et al. in view of Pugh et al. and further in view of Sharangpani and U.S. Patent No. 5,721,788 ("Powell et al."). Claims 14-16 and 22 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Broder et al. in view of Powell et al. and further in view of Pugh et al. or AAPA.

Claim Objections

Claims 1 and 17 stand objected to as allegedly not being indented properly. Applicant has amended claims 1 and 17 so that they are now properly indented. Accordingly, Applicant respectfully requests that the objections be withdrawn.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-4, 8-10, and 17-20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Broder et al. in view of Pugh et al. or Applicant admitted prior art (AAPA) and further in view of Sharangpani. As per claim 1, the rejection is understood to be based on the premise that Broder et al. discloses a method for detecting similar objects in a collection of such objects, comprising processing a query to produce the collection of objects and, for each of two objects, modifying a previous method for detecting similar objects. Broder et al. is cited as teaching all of the limitations of claim 1, except for the limitations "...constructing a plurality of hash tables for the collection of objects produced by processing the query," "...so that memory requirements are reduced while avoiding false

detections approximately as well as in the previous method,” “compressing . . . wherein the number of bits of precision is reduced from a number of bits of precision used in the previous method,” and “wherein the number of matching supersamples is greater than a number of matching supersamples required in the previous method.” Sharangpani and Pugh et al. are cited as disclosing these limitations.

Applicant respectfully traverses the rejection. Claim 1, as amended, recites the limitation “compressing each of the seven supersamples to sixteen bits of precision.” By contrast, Broder et al. discloses the use of “64 bits fingerprints.” See column 9, lines 15 and 20 (“8 bytes fingerprints,” *i.e.*, 64 bits). Applicant respectfully submits that Broder et al. further teaches that the use of 64-bit fingerprints is important for reducing fingerprint collisions. See column 9, lines 14-15. Indeed, in Broder et al., “the parameters are chosen so that even one common super-shingle is a very good indication of a very high resemblance between two documents, and the probabilities of false negatives and false positives are kept minimal.” Column 7, lines 27-30. Accordingly, Broder et al. teaches away from using fingerprints of significantly less than 64 bits of precision, as fingerprints having significantly less than 64 bits of precision would increase the likelihood of fingerprint collisions, and the probabilities of false positives would be significantly increased.

While Sharangpani discloses a “truncate rounding mode” in which bits are truncated to round at the desired precision (column 1, lines 24-27) and Powell et al. discloses a signature that is a binary number between 16 and 32 bits long (column 3, lines 39-41), Applicant respectfully submits that one of ordinary skill in the art would not be motivated to combine the teachings of Broder et al. and Pugh et al. with the teachings of either Sharangpani or Powell et al. Reducing the precision of the fingerprints of Broder et al. from 64 bits to 16 bits would significantly increase the likelihood of fingerprint collision and would alter the operation of the method of Broder et al. such that one or even two common super-shingles would no longer be a strong indication of a very high resemblance between two documents.

For at least these reasons and the reasons discussed in previous papers, Applicant respectfully submits that neither Broder et al., Sharangpani, nor Pugh et al., considered individually or in combination, discloses all of the limitations of claim 1. Thus, claim 1 is patentable over Broder et al. in view of Sharangpani and further in view of Pugh et al.

Claims 2-4 and 8-10 depend from claim 1 and are also patentable over Broder et al. in view of Sharangpani and further in view of Pugh et al. at least by reason of this dependency.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Broder et al. in view of Pugh et al. and further in view of Sharangpani and Powell et al. Claim 6 is cancelled, as the limitation that the supersamples are compressed to sixteen bits of precision is now incorporated into claim 1, as amended above.

Claims 14-16 and 22 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Broder et al. in view of Powell et al. and further in view of Pugh et al. or AAPA. Applicant respectfully traverses the rejection. Claims 14 and 22, as amended, recite similar limitations as those discussed above in connection with claim 1. In particular, claims 14 and 22 recite the limitation of “compressing each supersample to 16 bits of precision” and are patentable at least for the reasons discussed above in connection with claim 1. Accordingly, claims 14 and 22 are patentable over Broder et al. in view of Powell et al. and further in view of Pugh et al. Claims 15 and 16 depend from claim 14 and are patentable at least by reason of this dependency.

Based at least on the above remarks, Applicant respectfully submits that the currently pending claims are patentable over the prior art of record and requests reconsideration and removal of the rejections under 35 U.S.C. § 103(a).

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CONCLUSION

In view of the above amendments and remarks, Applicant respectfully submits that the present application is in condition for allowance. Reconsideration of the application is respectfully requested.

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/Kenneth R. Eiferman/

Kenneth R. Eiferman

Registration No. 51,647

Woodcock Washburn LLP
Cira Centre
2929 Arch Street, 12th Floor
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439